Attachment 5

Preliminary Draft Report Staff Recommendations For Agricultural Order
February 1, 2010

PRELIMINARY DRAFT
INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

REGARDING

CONDITIONAL WAIVER FOR DISCHARGES FROM IRRIGATED LANDS
(ORDER NO. R3-2010-00XX)

The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) is proposing to update and revise Order No. R3-2004-0117, the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2004 Irrigated Ag Order) adopted July 9, 2004 and renewed for one year on July 10, 2009. Revisions to the Irrigated Ag Order are proposed to address the following issues.

- The 2004 Irrigated Ag Order expired in July 2009, and was extended to July 2010.
- California Water Code section 13269 limits the term of a waiver to five years, but allows a waiver to be renewed and modified after public review. The current term expires in July 2010.
- Vague language in some of the existing provisions needs clarification.
- Inconsistencies with regulatory requirements need to be resolved.
- Conditions need to be modified to adequately protect water quality and beneficial uses of waters throughout the Central Coast Region.
- Monitoring improvements are needed to facilitate compliance evaluation as required by Water Code section 13269.
- Definitions, references, and findings are needed to clarify and support the modified conditions.

The project evaluated in this Initial Study/Environmental Checklist is a Conditional Waiver of Waste Discharge Requirements and the requirement to submit a report of waste discharge (Preliminary Draft Irrigated Ag Order). Prior to adoption of the 2004 Conditional Waiver, the Central Coast Water Board adopted a Negative Declaration pursuant to the California Environmental Quality Act (CEQA). This new Order documents the existing water quality conditions within the Central Coast Region. The quality of some of the water bodies within the Central Coast Region are severely degraded or polluted and some have been listed as impaired pursuant to Clean Water Act section 303(d). This Preliminary Draft Irrigated Ag Order includes conditions that will result in the protection and improvement of the quality of the waters of the State, does not authorize dischargers to degrade waters of the State and does require dischargers to comply with water quality standards, protect beneficial uses, and protect against pollution and nuisance. The project, therefore, does not cause effects that are more severe than discussed in the 2004 Environmental Analysis/Negative Declaration. The conditions of the waiver, if complied with, will protect the waters of the State.

This report contains the following information relating to revisions to the Preliminary Draft Irrigated Ag Order proposed in Order No. R3-2010-00XX:

1. A description of proposed activity and proposed alternatives,
2. An environmental checklist,
3. An evaluation of potentially significant environmental impacts.

I. DESCRIPTION OF PROPOSED ACTIVITY

Discharges from irrigated agricultural activities are subject to regulation under the California Water Code (CWC). CWC Section 13260 requires those persons discharging waste or proposing to discharge waste where it could impact the quality of waters in the state to submit a report of waste discharge (application) and obtain authorization from the Water Board for the discharge. Discharge authorization can be in the form of waste discharge requirements or a conditional waiver of waste discharge requirements. Historically, discharges from irrigated agricultural activities have been authorized by a conditional waiver of waste discharge requirements, most recently the 2004 Conditional Waiver (Order No. R3-2004-0117).

As described above, the purpose of this project is to update and revise conditions specified in the 2004 Irrigated Ag Order. The Preliminary Draft Irrigated Ag Order (Order No. R3-2010-00XX) is proposed to regulate discharges of waste from irrigated agricultural lands in a manner protective of water quality and consistent with state and federal regulations. The Preliminary Draft Irrigated Ag Order would build upon the requirements in the 2004 Irrigated Ag Order, including the development and implementation of Farm Plans by focusing on priority water quality issues and including date-specific implementation of management practices expected to yield the greatest water quality protection. The Preliminary Draft Irrigated Ag Order would also build upon the existing cooperative monitoring program by retaining watershed-scale, receiving water monitoring and adding individual monitoring and reporting to verify compliance. The Preliminary Draft Irrigated Ag Order will focus efforts on reducing or eliminating discharges of waste associated with irrigated agricultural activities, especially those discharges of waste in irrigation runoff, and percolation to groundwater in the most severely impaired areas. The Preliminary Draft Irrigated Ag Order includes a variety of compliance options to maximize Dischargers' flexibility in achieving desired water quality improvement. Similar to the 2004 Conditional Waiver, the Preliminary Draft Irrigated Ag Order also includes significantly reduced monitoring and reporting requirements for those agricultural discharges identified as having relatively low-risk for water quality impairment. Changes proposed in this Preliminary Draft Irrigated Ag Order are intended to clarify existing requirements, strengthen certain conditions, and facilitate compliance evaluations in a manner that will enhance water quality protection. No new water quality standards are proposed. Specifically, changes proposed in the updated Irrigated Ag Order include:

- Extends effective term of the conditional waiver to 2015.
- Revises enrollment and termination process (new information required).
- Requires submittal, certification, and revision (if needed) of Farm Plans.

- Expands contents of Farm Plan, including management practices to eliminate or reduce pollution loading and discharges.
- Adds management practices implementation schedule.
- Requires riparian buffer (or alternative aquatic habitat protection) setback in certain circumstances.
- Prohibits disturbance of wetlands and streams.
- Removes education as a requirement.
- Adds monitoring to facilitate compliance evaluation.
- Adds definitions, references, and expanded findings to clarify and support the requirements specified in the Preliminary Draft Irrigated Ag Order.

The Preliminary Draft Irrigated Ag Order would regulate discharges from agricultural lands throughout the Central Coast Region. Therefore, the project area encompasses agricultural areas throughout the entire Central Coast Region; including all or portions of San Mateo, Santa Cruz, Santa Clara, San Benito, Monterey, San Luis Obispo, Santa Barbara, and Ventura Counties.

Most waterbodies located in or near areas influenced by agriculture in the Central Coast Region have unsafe levels of nutrients, unsafe levels of pesticides/toxicity, and excessive levels of sediment/turbidity, evidenced by exceedances of surface water quality standards, and poor biological and physical conditions. Most surface waterbodies in agricultural watersheds are not suitable for drinking water, recreation (swimming or fishing), or aquatic life. Surface water quality data shows severe water quality impairment in most areas of the region but some signs of improvement in a few areas.

Groundwater is severely impaired by nitrate contamination in many areas of the Central Coast Region. In many areas, nitrate concentration in groundwater is orders of magnitude above the drinking water standard resulting in a significant threat to public health. This is critically important because much of the Central Coast Region is almost completely dependent on groundwater resources.

Aquatic habitat is degraded in many areas of the region as evidenced by poor biological and physical conditions. Most surface waterbodies in agricultural watersheds are not suitable for safe recreational fishing or to support aquatic life.

Water quality of agricultural discharges is often poor, carrying nitrates at concentrations above safe drinking water levels and pesticides at concentrations above toxic levels to waterbodies in the region. Agricultural discharges contribute significantly to water quality conditions. In some cases, agricultural discharges are the sole or primary source of contamination to impaired waterbodies. Even in areas where agricultural is not the only source of contamination, it is a primary contributor.

The following summary indicators of impacts and impairments are based on water quality conditions described in more detail in Water Quality Conditions in the Central Coast Region Related to Irrigated Agriculture, Attachment 1 to Preliminary Draft Staff Recommendations for an Agricultural Order, February 1, 2010.

Surface Water Impairment:

- Many of the same areas that showed serious contamination from agricultural pollutants five years ago are still seriously contaminated.

- The 2008 Clean Water Act Section 303(d) List of Impaired Waterbodies for the Central Coast Region (Impaired Waters List) identified surface water impairments for approximately 167 water quality limited segments related to a variety of pollutants (e.g. salts, nutrients, pesticides/toxicity, and sediment/turbidity). Sixty percent of the surface water listings identified agriculture as one of the potential sources of water quality impairment.
- Agricultural discharges most severely impact surface waterbodies in the lower Salinas and Santa Maria watersheds, both areas of intensive agricultural activity. Evaluated through a multi-metric of water quality, 82 percent of the most degraded sites in the Central Coast Region are in these agricultural areas.
- Widespread improvements in nitrate concentrations in areas that are most heavily impacted are not occurring and in a number of sites in the lower Salinas and Santa Maria watersheds appear to be getting worse.
- Thirty percent of all sites from CCAMP and CMP have average nitrate concentrations that exceed the drinking water standard, and approximately 57 percent exceed the level necessary to protect aquatic life. Several of these water bodies have average nitrate concentrations that exceed the drinking water standard by five-fold or more. Some of the most seriously polluted waterbodies include the Tembladero Slough system (including Old Salinas River, Alisal Creek, Alisal Slough, Espinosa Slough, Gabilan Creek and Natividad Creek), the Pajaro River (including Llagas Creek, San Juan Creek, and Furlong Creek), the lower Salinas River (including Quail Creek, Chualar Creek and Blanco Drain), the lower Santa Maria River (including Orcutt-Soloman Creek, Green Valley Creek, and Bradley Channel), and the Oso Flaco watershed (including Oso Flaco Lake, Oso Flaco Creek, and Little Oso Flaco Creek).
- Discharges from some agricultural drains have shown toxicity every time the drains are sampled. Researchers collaborating with CCAMP have shown that these toxic discharges can cause toxic effects in river systems that damage benthic invertebrate communities.
- Agricultural use of pyrethroid pesticides in the Central Coast Region and associated toxicity is among the highest in the state. In a statewide study of four agricultural areas conducted by the Department of Pesticide Regulation (DPR), the Salinas study area had the highest percent of surface water sites with pyrethroid pesticides detected (85 percent), the highest percent of sites that exceeded levels expected to be toxic (42 percent), and the highest rate (by three-fold) of active ingredients applied (113 lbs/acre).
- Agricultural discharges contribute to sustained turbidity with many sites heavily influenced by agricultural discharges exceeding 100 NTUs as a median value. Most CCAMP sites have a median turbidity level of under 5 NTUs. Resulting turbidity greatly exceeds levels that impact the ability of salmonids to feed. Many of these sites are located in the lower Santa Maria and Salinas-Tembladero watersheds.
- Agricultural discharges result in water temperatures that exceed levels that are desirable for salmonids at some sites in areas dominated by agricultural activity. Several of these sites are in major river corridors that provide rearing and/or migration habitat for salmonids. These include the Salinas, Santa Maria, and Santa Ynez rivers.
- Bioassessment data shows that creeks in areas of intensive agricultural activity have impaired benthic communities. Aquatic habitat is often poorly shaded, high in temperature, and has in-stream substrate heavily covered with sediment.

- Several Marine Protected Areas (MPAs) along the Central Coast are at risk of pollution impacts from sediment and water discharges leaving river mouths. Three of the MPAs, Elkhorn Slough, Moro Cojo Slough and Morro Bay, are estuaries that receive runoff into relatively enclosed systems.
- For Moro Cojo Slough and Elkhorn Slough, nitrates, pesticides and toxicity are documented problems.

Groundwater Quality Impairment:

- Groundwater contamination from nitrate severely impacts public drinking water supplies in the Central Coast Region. A Department of Water Resources (DWR) survey of groundwater quality data collected between 1994 and 2000 from 711 public supply wells in the Central Coast Region found that 17 percent of the wells (121 wells) detected a constituent at concentrations above one or more drinking water standards or primary maximum contaminant levels (MCLs). Nitrate caused the most frequent MCL exceedances (45 mg/L nitrate as nitrate or 10 mg/L nitrate as nitrogen), with approximately 9 percent of the wells (64 wells) exceeding the MCL for nitrate. According to data maintained in the GAMA-Geotracker database, recent impacts to public supply wells are greatest in portions of the Salinas Valley (up to 20 percent of wells impacted) and Santa Maria groundwater (approximately 17 percent) basins. In the Gilroy-Hollister Groundwater Basin, 11 percent are impacted, and the CDPH identified over half of the drinking water supply wells as vulnerable to discharges from agricultural-related activities. Due to these elevated concentrations of nitrate in groundwater, many public water supply systems are required to conduct wellhead treatment, at significant cost, to remove nitrate before delivery to the drinking water consumer.
- Groundwater contamination from nitrate severely impacts shallow domestic drinking water supplies in the Central Coast Region. Domestic wells (wells supplying one to several households) are screened in shallower zones, and typically have higher nitrate concentrations as a result. Water quality monitoring of domestic wells is not generally required and water quality information is not readily available, however based on the limited data available, the number of domestic wells that exceed the nitrate drinking water standard is likely in the range of several hundreds.
- In Monterey County, 25 percent of 352 wells sampled (88 wells) had concentrations above the nitrate drinking water standard in the northern Salinas Valley. In portions of the Salinas Valley, up to approximately 50 percent of the wells surveyed had concentrations above the nitrate drinking water standard, with average concentrations nearly double the drinking water standard and the highest concentration of nitrate approximately nine times the drinking water standard. Nitrate exceedences in the Gilroy-Hollister and Pajaro groundwater basins are similar, as reported by local agencies/districts for those basins.
- In many cases, whole communities relying on groundwater for drinking water purposes are affected. Local agencies have reported the shut down of domestic drinking water wells due to high nitrate concentrations. In addition, local agencies and consumers have reported impacts to human health resulting from nitrate contaminated groundwater likely due to agricultural land uses, and spent significant financial resources to ensure proper drinking water treatment and reliable sources of quality drinking water for the long-term. In the Central Coast Region, the Monterey County community of San Jerardo and the City of Morro Bay are among the local communities affected by nitrate.

Aquatic Habitat Degradation:

- Agricultural activities result in the alteration of riparian and wetland areas, continues to degrade the waters of the State and associated beneficial uses. Owners and operators of agricultural operations historically removed riparian and wetland areas to plant cultivated crops and in many areas continue to do so.
- As a result of aquatic habitat modification, watershed functions that serve to maintain high water quality, aquatic habitat and wildlife - by filtering pollutants, recharging aquifers, providing flood storage capacity, and habitat have been disrupted.
- Data collected from CCAMP and CMP indicate that population characteristics of aquatic insects (benthic macroinvertebrate) important to ecological systems reflects poor water quality, degradation or lack of aquatic habitat, and poor overall watershed health at sites in areas with heavy agricultural land use. Aquatic habitat is often poorly shaded, high in temperature, and stream bottoms are heavily covered with sediment.
- Lower Salinas watershed and lower Santa Maria watershed score low for common measures of benthic macroinvertebrate community health and aquatic habitat health.
- Unstable, bare dirt and tilled soils, highly vulnerable to erosion and stormwater runoff, are common directly adjacent to surface waterbodies in agricultural areas. Erosion and stormwater runoff from agricultural lands contributes sediment and sustained turbidity at levels that impact the ability of salmonids to feed. Many of these sites are located in the lower Santa Maria and Salinas-Tembladero watersheds.
- Degradation of aquatic habitat also results in water temperatures that exceed levels that are desirable for salmonids at some sites in areas dominated by agricultural activity. Several of these sites are in major river corridors that provide rearing and/or migration habitat for salmonids. These include the Salinas, Santa Maria, and Santa Ynez rivers.
- Real and/or perceived incompatible demands between food safety and environmental protection and subsequent actions taken by Dischargers to address food safety concerns associated with environmental features have resulted in the removal of aquatic habitat and related management practices.
- According to a Spring 2007 survey by the Resource Conservation District of Monterey County (RCDMC), 19 percent of 181 respondents said that their buyers or auditors had suggested they remove non-crop vegetation from their ranches. In response to pressures by auditors and/or buyers, approximately 15 percent of all growers surveyed indicated that they had removed or discontinued use of previously adopted management practices used for water quality protection. Grassed waterways, filter or buffer strips, and trees or shrubs were among the management practices removed.

Agricultural Discharge Water Quality

Numerous studies document the impact of agricultural discharges on water quality and specific pollutants contained in irrigation runoff. Research conducted by the Food and Agriculture Organization of the United Nations found that irrigation return flow resulted in a significant increase in nitrogen, phosphorous, pesticide residues, and sediments. Agricultural research conducted by University of Calfornia Cooperative Extension

(UCCE) found nitrate values in agricultural tailwater at 26, 53, and 75 mg/L NO_3-N. Ammonium values were extremely high at 13, 31, and 39 mg/L. UCCE researchers indicated that the high levels of nitrogen at the site were likely caused by the grower injecting N fertilizer into the irrigation water during the 2nd and 3rd irrigation events. A UC Davis study of Salinas Valley farms found that by the second and third crop cycles, farm soils had begun to accumulate nitrogen, but that growers continued with the same fertilization schedule. In addition, soils are high enough in phosphorus that in some areas no added phosphorus is necessary; however, growers continue to add this chemical to their fields. These practices lead to excess fertilizer leaving the farm, which ultimately cause significant water quality impairment. Similar to tailwater, tile drain water with elevated nitrate levels has been found draining into surface water bodies. Nitrate concentrations in selected waterbodies in the Pajaro Valley Watershed have been found to range from 19 to 89.5 mg/l (compared to the drinking water standard, 10 mg/l).

Pesticides have been detected in agricultural tailwater and routinely exceed the toxicity water quality standard (lethal to aquatic life). Regionwide, CCAMP and the Cooperative Monitoring Program have conducted toxicity monitoring in 80 streams and rivers. Some measure of lethal effect (as opposed to growth or reproduction) has been observed at 65 percent of the water bodies monitored.

Alternatives to this Project

1. Adoption of an alternative Irrigated Ag Order

The Central Coast Water Board could adopt an Irrigated Ag Order containing terms and conditions significantly different and less stringent from those proposed in the Preliminary Draft Irrigated Ag Order. This alternative is not recommended as it could result in failure to be consistent with the Basin Plan as required by Water Code section 13269, continued water quality problems, inadequate protection of beneficial uses, a longer period of on-going degradation before improvements start, and the inabiity to achieve the goals of effective long-term water quality protection in a clear and efficient manner. Additionally, a different Irrigated Ag Order may not resolve the issues identified in evaluating the 2004 Irrigated Ag Order:

- Vague language in some of the existing provisions needs clarification.
- Inconsistencies with regulatory requirements need to be resolved.
- Conditions need to be strengthened to adequately protect water quality and beneficial uses of waters throughout the Central Coast Region.
- Monitoring improvements are needed to facilitate compliance evaluation to comply with Water Code section 13269.
- Definitions, references, and expanded findings are needed to clarify and support the conditions specified in the Preliminary Draft Irrigated Ag Order.

An alternative Irrigated Ag Order, or Conditional Waiver of Waste Discharge Requirements containing similar terms and conditions as proposed in this Preliminary Draft Irrigated Ag Order would not significantly differ in potential environmental impacts, because the methods of compliance with such terms and conditions would be similar to implement the requirements (management practices to control pollution loading and irrigation runoff to surface waters and groundwaters). This alternative is not recommended.

2. Adopt individual or general waste discharge requirements

The Central Coast Water Board could adopt individual or general waste discharge requirements for discharges resulting from irrigated agricultural lands. This alternative is not recommended. Individual waste discharge requirements would require significantly more staff resources to administer and is likely to achieve a similar level of water quality improvement and protection of beneficial uses. General waste discharge requirements could be developed, however terms and conditions similar to those specified in the Preliminary Draft Irrigated Ag Order would be proposed. Essentially, the Preliminary Draft Irrigated Ag Order is similar to a General Waste Discharge Requirements Order, with streamlined application/enrollment requirements. The terms and conditions specified in the Preliminary Draft Irrigated Ag Order reflect those needed to demonstrate compliance with federal and State water quality regulations, and provide appropriate protection of waters of the state. Individual or general waste discharge requirements containing the same terms and conditions as proposed in the Preliminary Draft Irrigated Ag Order would not significantly differ in potential environmental impacts since the methods of compliance with such provisions (e.g. implementation of management practices to eliminate or reduce pollutant loads or runoff) would be the same. This alternative is not recommended.

3. Take no action

Discharges from irrigated agricultural lands cause the most severe and significant water quality problems in the Central Coast Region. The existing Irrigated Ag Order will expire leaving no controls on irrigated agricultural discharges. If no action is taken, the current situation would continue or worsen, which does not provide adequate protection of water quality or compliance with the California Water Code. This alternative is not recommended.

II. APPLICABLE INFORMATON

1. Lead Agency Name and Address

Central Coast Water Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

2. Contact Person and Phone Number: Angela Schroeter (805) 542-4644

3. Project Location: Central Coast Region

4. Project Sponsor's Name and Address

Central Coast Water Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

5. Other Public Agencies whose Approval is Required

No other public agency approval is required to finalize the updated Irrigated Ag Order.

III. EVALUATION OF ENVIRONMENTAL IMPACTS

A significant effect on the environment is defined in regulation as "*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant* (14 CCR section 15382)."

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
1. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in area?	☐	☐	☐	☒
2. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☒	☐
3. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is not attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
4. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
5. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
6. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
7. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
evacuation plan?				
h) Expose people or structures to a significant risk of loss injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
8. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete ground water supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
9. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
10. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally –important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
11. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
12. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
13. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
14. RECREATION – Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
15. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
16. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
17. MANDATORY FINDINGS OF SIGNIFICANCE	☐	☐	☐	☒
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

IV. ENVIRONMENTAL EVALUATION DISCUSSION (of checklist questions answered Potentially Significant Impact, Less than Significant with Mitigation Incorporation, or Less than Significant Impact).

The purpose of the Preliminary Draft Irrigated Ag Order is to achieve water quality objectives protective of beneficial uses through implementation of management practices. There are currently many practices available to growers which will have a beneficial impact on water quality by eliminating toxicity, reducing nitrate loading to surface waters and groundwaters and reducing sediment loading to surface waters. These practices include improving irrigation efficiency, capturing and treating or controlling irrigation runoff, and reducing the total amount of fertilizer and pesticides applied to crops. Management practices are described in the Preliminary Draft Irrigated Ag Order. The Preliminary Draft Irrigated Ag Order does not specify particular management practices that must be implemented, however the discussion below addresses management practices that are likely to be implemented and the environmental impacts resulting from those practices.

Based upon the checklist above, the following impacts may result from this project. Each of these impacts is less than significant. Numbering corresponds to the checklist.

2.a and 2.c: Management practices that could affect the amount of land used for producing crops include vegetating farm roads, installing vegetated filter strips along

creeks and at the ends of field rows, planting cover crops, installing sediment detention basins, planting riparian buffers, maintaining setbacks to water bodies, or alternative water quality protection plans to protect aquatic habitat. The practices described above, or other potential strategies that could be pursued by growers, are unlikely to lead to a conversion of prime agricultural farmland to other uses. Although some land may be used to install pollution control structures, vegetated for erosion control or riparian area protection, rather than planted to crops, the overall land use would still be agricultural. Accordingly, this impact is considered less than significant.

4.b and 4.c: Some of the management practices likely to be implemented to comply with the Preliminary Draft Irrigated Ag Order are specifically designed to eliminate agricultural runoff to surface waters. The resultant reduction in runoff to surface waters could impact biological resources of streams and wetland areas by reducing available water. However, irrigation efficiency improvements (to reduce surface runoff) will also result in less water pumped from the ground. Therefore, some stream and wetland areas will likely be recharged by enhanced groundwater sources in lieu of agricultural runoff. Additionally, management practices that capture and reuse runoff water on land will also result in less water pumped from the ground and recharge the groundwater, therefore may also provide more flow to streams and wetland areas via groundwater. The flow in some streams in agricultural areas are dominated by reservoir releases and stormwater flows from all land uses, so reduced irrigation runoff in these locations would have minimal impacts. Some streams, however, would be dry during the summer season if not for irrigation runoff; in the few cases where the irrigation runoff is of sufficient volume to support aquatic habitat and fish migration, flow elimination may cause some environmental impact. In all cases, loss of instream flow from reduced irrigation runoff will be coupled with reduced pollution loading, so water quality conditions (such as toxicity) would likely improve (in the short-term, pollutant concentrations may increase, but seasonally these concentrations would dissipate or be diluted during subsequent rainy seasons). Accordingly, this impact is considered less than significant.

The Central Coast Water Board concludes that adoption of and compliance with the Preliminary Draft Irrigated Ag Order will not have a significant negative impact on the environment. The Central Coast Water Board will not authorize waivers of waste discharge requirements for new discharges except where the local governing jurisdiction has approved development after complying with CEQA and incorporating appropriate mitigation measures. The Central Coast Water Board does not have jurisdiction to approve development, but only to regulate discharges of waste. There is no information available to the Central Coast Water Board, other than speculation, that the update of the Irrigated Ag Order will result in more or less development. The Preliminary Draft Irrigated Ag Order establishes more stringent conditions regulating discharges from irrigated lands and will result in improved protection of waters of the state.